REMARKS

Claims 1, 6, 22, 44, 49, 63, and 67 have been amended merely to clarify the invention. Claims 1-69 remain pending.

The Examiner rejected claims 1-69 under 35 U.S.C. §102(e) as being anticipated by Black et al. (U.S. patent 6,614,796). The Examiner's rejections are respectfully traversed as follows.

Claim 1 is directed towards a "method for controlling congestion at a network switch." Claim 1 also requires "receiving a frame having a source identifier field corresponding to a source node and a destination identifier field corresponding to a destination node, the frame having been transmitted to the network switch through a first intermediate switch between the network switch and the source node." The frame has been sent from a source node through an intermediate node and then a network switch to a destination node. Claim 1 further requires "characterizing traffic flow at the network switch" and "sending a first instruction from the network switch to the first intermediate switch for the first intermediate switch to control traffic from the source node to the destination node, wherein the first instruction is based on the operation of characterizing of traffic flow at the network switch." Thus, one intermediate switch characterizes its own traffic and then sends instruction to another intermediate switch to control traffic between a source and a destination node based on such characterization. Claims 63 and 67 include mechanisms for performing the operations of claim 1.

Claim 22 is directed to a method of "controlling traffic flow between first and second end nodes through first and second intermediate nodes." Claim 22 recites "transmitting a first frame having a source identifier corresponding to the first end node and a destination identifier corresponding to the second end node, wherein the frame is transmitted at a first intermediate node to a second intermediate node between the first intermediate node and the second end node." Claim 22 also recites "receiving a second frame that was generated by from the second intermediate node, the second frame having a source identifier corresponding to the second end node and a destination identifier corresponding to the first end node, wherein the second frame is received at the first intermediate node and includes instructions for the first intermediate node to adjust the current allowed rate from the first end node to the second end node." Claim 22 further recites "at the first intermediate node, adjusting the current allowed rate from the first end node to the second end node upon receiving the second frame." A first intermediate node receives instructions that were generated by a second intermediate node, and these instructions cause the first intermediate to control its traffic flow between a first and second end node, where the traffic is sent from a first end node through the first and second intermediate nodes to arrive at a second end node.

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Claim 44 is directed towards a "switch for controlling the traffic flow between a source node and a destination node." The switch includes "a first port for coupling to a first external node" and "a second port for coupling to a second external node." The switch also includes "a first queue associated with the first port for receiving data from the first external node being sent to a third node that is reached through second port and the second external node, the first queue including a first portion for holding data for transmission through the first port and a second portion for holding data for transmission through the second port" and "a filter coupled to the first queue, the filter configured to receive data from the first queue and determine whether transmission of the data should be delayed based on information received from and generated by the second external node."
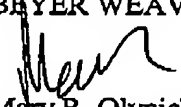
The Black et al. reference fails to teach or suggest mechanisms for generating or using instructions that are generated by a first intermediate switch (or node) for use by a second intermediate switch (or node) to control flow between two end nodes, in the manner claimed. In contrast, the Black et al. reference merely utilizes standard primitives, such as OPN, RRDY, and CLS to control traffic flow between end nodes, and these primitives are always generated by an end node, rather than an intermediate switch or node. That is, an OPN primitive is sent from a first end node to a second end node via a switch. The second end node sends a RRDY primitive when it is available for receiving data from the first end node, and either end node can terminate the flow by sending a CLS primitive to the other end node. See Col. 1, Lines 23-27: "the destination node controls the amount of data it receives by transmission of an RRDY primitive to the source node each time the destination node is ready to receive another frame." See also 4, Lines 6-13. See Col. 8, Line 47 through Col. 9, Line 25, which describe these primitives as being sent between a source and a destination node. Although these primitives may be viewed as instructions for controlling flow, they are not generated by an intermediate node/switch for use by another intermediate node/switch, in the manner claimed. Instead, the "instructions" are generated by the end nodes and merely pass through the intermediate node or switch of Black et al. Accordingly, since Black et al. fails to teach or suggest mechanisms for sending or receiving instructions for controlling flow, where the instructions are generated by a first intermediate node/switch and sent to (or received by) a second intermediate node to control flow between two end nodes, in the manner claimed, it is respectfully submitted that claims 1, 22, 44, 63 and 67 are patentable over the cited reference.

The Examiner's rejections of the dependent claims are also respectfully traversed. However, to expedite prosecution, all of these claims will not be argued separately. Claims 2-21, 23-43, 45-62, 64-66, and 68-69 each depend directly or indirectly from independent claims 1, 22, 44, 63, or 67 and, therefore, are respectfully submitted to be patentable over cited art for at least

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the reasons set forth above with respect to claims 1, 22, 44, 63, and 67. Further, the dependent claims require additional elements that when considered in context of the claimed inventions further patentably distinguish the invention from the cited art. For example, claim 6 requires "the edge quench frame includes network switch queue level information that indicates whether an optimal queue level has been exceeded." Black et al. fails to teach or suggest mechanisms for sending such information from an intermediate node/switch to another intermediate node/switch, in the manner claimed.

Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

Respectfully submitted,
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